

Remarks

This Application has been carefully reviewed in light of the final Office Action mailed May 20, 2004. Applicants believe all pending claims are allowable over the references cited by the Examiner without amendment and respectfully provide the following remarks. Applicants respectfully request reconsideration and allowance of all pending claims.

I. Applicants' Claims are Allowable over the Proposed *Gross-Murphy* Combination

The Examiner rejects Claims 1-3, 5-7, 9-15, and 17-35 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,802,253 to Gross, et al. ("*Gross*") in view of U.S. Patent 5,481,707 to Murphy, Jr. et al. ("*Murphy*"). Applicants respectfully disagree.

A. The Proposed *Gross-Murphy* Combination Fails to Disclose, Teach, or Suggest Various Limitations Recited in Applicants' Claims

Gross discloses a rule-based system for handling incoming email messages. (Title; Abstract) According to the system disclosed in *Gross*, a plurality of rules are defined, each rule including an event indicia (when), a condition indicia (if), and an action indicia (then) (i.e. a when-if-then triplet). (See Column 2, Lines 44-49; Column 4, Lines 21-30; Claim 1) Events include receipt of a new message, the form of a received message, the reading of a message, the filing of a message, and other events. (See Column 4, Line 45 through Column 6, Line 13 (describing the different types of events); Claim 5) An event generator detects the occurrence of events, such as the receipt of a new message. (See Claim 1; Column 4, Lines 33-44) An event manager includes one or more event queues and creates event records for the events to store in the event queue. (See Claim 1; Column 7, Lines 30-34) For received messages, the event manager determines whether an event occurred, and if an event occurred (e.g., the message is a newly received message), the event manager creates a new message event (which includes a pointer to the newly received message) and stores the new message event in the event queue for processing. (See Column 7, Lines 30-34) A rule processor determines which of the rules have an event (a when) corresponding to the detected event and invokes only those rules for which the event indicia (when) corresponds to the determined event. (See Abstract; Column 2, Lines 49-55) The condition indicia (if) of each determined

rule is then evaluated and if the condition is met, the action (then) identified in the rule is performed. (See Claim 1; Column 4, Lines 31-32; Column 8, Lines 16-21)

According to the system disclosed in *Gross*, a user can also define events and rules for handling the events. (See, e.g., Figures 10A-10B) For example, a user can specify that upon the event of a new email message, if the message is from E.Flynn, then the message should be moved to the "Status Reports" folder. (See Figures 10A-10B) The focus of *Gross* is on the use of the when-if-then triplet, "which facilitates definition of events considered to be significant events upon which to trigger actions." (See Abstract; Column 2, Lines 44-55) This capability reduces processing associated with previous systems (i.e. those based on an if-then combination), which would require that all conditions be tested for an incoming messages, rather than only those within a relevant event. (See Column 2, Lines 22-30 and Lines 44-55)

However, *Gross*, whether considered alone or in combination with *Murphy*, fails to disclose, teach, or suggest various limitations recited in Applicants' claims. Applicants discuss Claim 1 as an example.

Applicants' Claim 1 recites:

A method for handling jobs within a computer system, comprising:
in response to a request for a job to be performed, generating a work item representing the job to be performed, ***the work item comprising a category, a state, a change history, and a description of the job represented by the work item, the job comprising a customer-generated request;***
placing the work item into a particular queue in a plurality of queues based at least in part on the category of the work item, each queue in the plurality of queues being for storing work items representing jobs to be performed;
in turn, opening the work item in the particular queue in response to a request from a business process, and executing one or more tasks on the work item, ***each task being for resolving at least a portion of the job represented by the work item by resolving at least a portion of the customer-generated request;*** and
after executing the one or more tasks on the work item:
modifying the state of the work item in response to execution of the one or more tasks;

*updating the change history of the work item in response to execution of the one or more tasks;
if the job represented by the work item is complete, archiving the work item; and
if the job represented by the work item is not yet complete, placing the work item into one of the plurality of queues based at least in part on one or more tasks to be executed on the work item.*

As the above discussion makes clear, *Gross* fails to disclose, teach, or suggest certain of the limitations recited in Claim 1.

For example, *Gross* fails to disclose, teach, or suggest *"generating a work item representing a job to be performed, the work item comprising a category, a state, a change history, and a description of the job represented by the work item, the job comprising a customer-generated request,"* as recited in Claim 1. *Gross* merely discloses a rule-based system for handling incoming email messages and does not even mention a job represented by a work item, let alone "the job comprising a customer-generated request," as recited in Claim 1.

As another example, *Gross* fails to disclose, teach, or suggest *"each task being for resolving at least a portion of the job represented by the work item by resolving at least a portion of the customer-generated request,"* as recited in Claim 1. At least because the rule-based email-handling system disclosed in *Gross* fails to disclose, teach, or suggest a "job represented by [a] work item, the job comprising a customer-generated request," *Gross* necessarily fails to disclose, teach, or suggest "each task being for resolving at least a portion of the job represented by the work item," particularly "by resolving at least a portion of the customer-generated request," as recited in Claim 1.

The Examiner acknowledges, and Applicants agree, that *Gross* does not teach the use of a state or change history in a work item. However, the Examiner argues that *Murphy* does teach these and other limitations. (See Office Action, Pages 3-4) Applicants respectfully disagree.

Murphy discloses a dedicated processor for task I/O and memory management. A dedicated processor called a task control unit, which is coupled to a memory interface unit, allocates and deallocates events, maintains the status of tasks running on the system, and schedules the execution of tasks. (Abstract)

The Examiner states, “*Murphy* teaches a request for a job to be performed, generating an item representing the job to be performed, the work item comprising a category, a state, a change history, and a description of the job represented by the work item, the job comprising a customer-generated request.” (Office Action, Page 3) Applicants respectfully disagree.

At the outset, Applicants note that *Murphy* has nothing to do with “a customer-generated request,” a “job comprising a customer-generated request,” or “a work item representing the job,” as recited in Claim 1. Instead, *Murphy* is directed to operating system level processing of tasks. For example, in describing problems with the prior art, *Murphy* discloses that computer systems perform various system operations, including memory-to-memory transfer, task scheduling, and I/O request handling. (Column 2, Lines 23-45) In prior art systems, the performance of these operations places a major burden on the central processing unit. (Column 2, Lines 46-47) According to *Murphy*, other prior art systems included multiprocessor systems in which several processors share data processing functions. (Column 2, Lines 52-55) Another approach used multiple dedicated processors, each programmed to perform a specific system operation. (Column 2, Lines 58-60) As can be seen from these excerpts, *Murphy* has nothing to do with jobs comprising customer-generated requests, as recited in Claim 1.

Moreover, even assuming for the sake of argument that the tasks disclosed in *Murphy* could be equated with the job comprising a customer-generated request recited in Claim 1, *Murphy* would still fail to disclose, teach, or suggest “in response to a request for a job to be performed, generating a work item representing the job to be performed, ***the work item comprising a category, a state, a change history, and a description of the job represented by the work item***, the job comprising a customer-generated request,” as recited in Claim 1. *Murphy* discloses a task control unit, which is a dedicated processor that oversees all tasks

and events that are active within the system. (Abstract; Column 11, Lines 15-16) The objective of the task manager is to keep each processor within the system as busy as possible. (Column 11, Lines 20-22) *Murphy* merely discloses that its task control unit maintains the state of each task and a plurality of task statistics. (Column 11, Lines 28-41) Thus, even assuming for the sake of argument that the task control unit maintaining a state of each task could be equated with “the work item comprising . . . a state,” as recited in Claim 1, and even further assuming that the task control unit maintaining a plurality of statistics could be equated with “the work item comprising . . . a change history,” as recited in Claim 1, *Murphy* would still fail to disclose, teach, or suggest “the work item comprising *a category*, a state, a change history, *and a description of the job represented by the work item*,” as recited in Claim 1.

Murphy also fails to disclose, teach, or suggest “after executing one or more tasks on the work item . . . modifying the state *of the work item* in response to execution of the one or more tasks,” as recited in Claim 1. As discussed above, *Murphy* merely discloses that its task control unit maintains the state of each task and a plurality of task statistics. (Column 11, Lines 28-41) These task states include a WAIT state, a READY state, and an ALIVE state. (Column 11, Lines 30-38) The task control unit can change a task from the WAIT state to the READY state, indicating that the task is waiting for a processor to become available. (Column 11, Lines 33-36 and 46-48) It appears that the Examiner equates the one or more tasks recited in Claim 1 with the task disclosed in *Murphy*. (See Office Action, Page 3) Assuming for the sake of argument that this equation is possible (which Applicants do not concede), *Murphy* merely discloses modifying the state of tasks. However, Claim 1 recites “after executing one or more tasks on the work item . . . modifying the state of *the work item* in response to completion of the one or more tasks.” This deficiency of *Murphy* stems from the fact that *Murphy* fails to even disclose, teach, or suggest a “job comprising a customer-generated request” and “a work item representing the job representing the job to be performed,” as recited in Claim 1.

Similarly, *Murphy* fails to disclose, teach, or suggest “after executing the one or more tasks on the work item . . . updating the change history *of the work item* in response to

execution of the one or more tasks” and “if the job represented by the work item is not yet complete, placing the work item into one of the plurality of queues *based at least in part on one or more tasks to be executed on the work item*,” as recited in Claim 1.

Murphy also fails to disclose, teach, or suggest “if the job represented by the work item is complete, archiving *the work item*,” as recited in Claim 1. The Examiner cites the following portion of *Murphy* as disclosing this limitation:

The IOU 803 acknowledges the message from the CMU 805 (step 915), and removes the IOCB from the result queue. If the IOCB has completed without error, then the IOU signals the TCU to change the task state of the waiting task, as indicated by the event in the IOCB, READY state. The TCU performs this operation (step 916). This completes the typical I/O sequence.

(Column 15, Lines 56-62) However, nowhere does this cited portion of *Murphy* mention anything about archiving a work item. Instead, this cited portion of *Murphy* merely mentions changing the task state. The Examiner also cites Column 11, Lines 42-50 of *Murphy* as disclosing this limitation. However, this cited portion merely discloses, “When the IOU completes an I/O operation for a particular task, the IOU notifies the [transfer control unit] that the required data is now located in main memory.” (Column 11, Lines 44-46) This in no way discloses, teaches, or suggests “if the job represented by the work item is complete, archiving *the work item*,” as recited in Claim 1. At best, the cited portion of *Murphy* discloses transferring data responsive to an I/O operation to main memory.

For at least these reasons, Applicants respectfully request reconsideration and allowance of independent Claim 1 and its dependent claims. For reasons similar to those discussed above with reference to independent Claim 1, Applicants respectfully request reconsideration and allowance of independent Claim 11 and its dependent claims.

B. The Proposed Gross-Murphy Combination is Inadequate and Improper

The rejection of Applicants' claims is also improper because the Examiner has not shown the required teaching, suggestion, or motivation in *Gross*, *Murphy*, or in the knowledge generally available to those of ordinary skill in the art at the time of the invention

to combine or modify *Gross* or *Murphy* in the manner the Examiner proposes. The rejected claims are allowable for at least this reason.

Applicants respectfully submit that the Examiner's conclusory assertion that it would have been obvious to combine the teachings of *Gross* with the teachings of *Murphy* to arrive at Applicants' invention is entirely insufficient to support a *prima facie* case of obviousness under 35 U.S.C. § 103(a) under the M.P.E.P. and the governing Federal Circuit case law.

The question raised under 35 U.S.C. § 103 is whether the prior art taken as a whole would suggest the claimed invention taken as a whole to one of ordinary skill in the art at the time of the invention. Accordingly, even if all elements of a claim are disclosed in various prior art references, which is certainly not the case here as discussed above, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill at the time of the invention would have been prompted to modify the teachings of a reference or combine the teachings of multiple references to arrive at the claimed invention. It is clear based at least on the many distinctions discussed above that the proposed *Gross-Murphy* combination does not, taken as a whole, suggest the claimed invention, taken as a whole. Applicants respectfully submit that the Examiner has merely pieced together disjointed portions of unrelated references to reconstruct Applicants' claims.

The M.P.E.P. sets forth the strict legal standard for establishing a *prima facie* case of obviousness based on modification or combination of prior art references. "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references where combined) must teach or suggest all the claim limitations." M.P.E.P. § 2142, 2143. The teaching, suggestion, or motivation for the modification or combination and the reasonable expectation of success must both be found in the prior art and cannot be based on an applicant's disclosure. *See Id.* (citations omitted). "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the

claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art" at the time of the invention. M.P.E.P. § 2143.01. Even the fact that references *can* be modified or combined does not render the resultant modification or combination obvious unless the prior art teaches or suggests the desirability of the modification or combination. *See Id.* (citations omitted). Moreover, "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. All words in a claim must be considered in judging the patentability of that claim against the prior art." M.P.E.P. § 2143.03 (citations omitted).

The governing Federal Circuit case law makes this strict legal standard even more clear.¹ According to the Federal Circuit, "a showing of a suggestion, teaching, or motivation to combine or modify prior art references is an essential component of an obviousness holding." *In re Sang-Su Lee*, 277 F.3d 1338, 1343, 61 U.S.P.Q.2d 1430, 1433 (Fed. Cir. 2002) (quoting *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 U.S.P.Q.2d 1456, 1459 (Fed. Cir. 2000)). "Evidence of a suggestion, teaching, or motivation . . . may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, the nature of the problem to be solved." *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). However, the "range of sources available . . . does not diminish the requirement for actual evidence." *Id.* Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." *In re Mills*, 916 F.2d at 682, 16 U.S.P.Q.2d at 1432. *See also In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998) (holding a *prima facie* case of obviousness not made where the combination of the references taught every element of the claimed invention but did not provide a motivation to combine); *In Re Jones*, 958 F.2d 347, 351, 21 U.S.P.Q.2d 1941, 1944 (Fed. Cir. 1992) ("Conspicuously missing from this record is any evidence, other than the PTO's speculation (if that can be called evidence) that one of ordinary skill in the herbicidal art would have been motivated to make the modification of the prior art salts

¹ Note M.P.E.P. 2145 X.C. ("The Federal Circuit has produced a number of decisions overturning obviousness rejections due to a lack of suggestion in the prior art of the desirability of combining references.").

necessary to arrive at" the claimed invention.). Even a determination that it would have been obvious to one of ordinary skill in the art at the time of the invention to try the proposed modification or combination is not sufficient to establish a *prima facie* case of obviousness. *See In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596, 1599 (Fed. Cir. 1988).

In addition, the M.P.E.P. and the Federal Circuit repeatedly warn against using an applicant's disclosure as a blueprint to reconstruct the claimed invention. For example, the M.P.E.P. states, "The tendency to resort to 'hindsight' based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art." M.P.E.P. § 2142. The governing Federal Circuit cases are equally clear. "A critical step in analyzing the patentability of claims pursuant to [35 U.S.C. § 103] is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. . . . Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one 'to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher.'" *In re Kotzab*, 217 F.3d 1365, 1369, 55 U.S.P.Q.2d 1313, 1316 (Fed. Cir. 2000) (citations omitted). In *In re Kotzab*, the court noted that to prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the examiner to show a motivation to combine the references that create the case of obviousness. *See id.* *See also, e.g., Grain Processing Corp. v. American Maize-Products*, 840 F.2d 902, 907, 5 U.S.P.Q.2d 1788, 1792 (Fed. Cir. 1988). Similarly, in *In re Dembiczak*, the Federal Circuit reversed a finding of obviousness by the Board, explaining that the required evidence of such a teaching, suggestion, or motivation is essential to avoid impermissible hindsight reconstruction of an applicant's invention:

Our case law makes clear that the best defense against the subtle but powerful attraction of hind-sight obviousness analysis is *rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references*. Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight.

175 F.3d at 999, 50 U.S.P.Q.2d at 1617 (emphasis added) (citations omitted).

With regard to the proposed *Gross-Murphy* combination, the Examiner states, "It would have been obvious to one skilled in the art to combine the teachings of Gross and Murphy in order to maintain accurate state information. By having accurate state information, one is able to determine which tasks are operating properly, thus being able to monitor the entire system in a more efficient manner." (Office Action, Page 4). First, even assuming this were true and that this motivation was actually present in the references, the Examiner has done nothing more than propose an alleged advantage (and one which Applicants do not admit could even be achieved by combining these references in the manner the Examiner proposes) of combining *Gross* with *Murphy*. The Examiner has not pointed to any portions of either *Gross* or *Murphy* that would teach, suggest, or motivate one of ordinary skill in the art at the time of invention to incorporate the event-driven and conditional rule based mail messaging system disclosed in *Gross* with the I/O task management techniques disclosed in *Murphy*. In fact, it is not even clear that one of ordinary skill in the art at the time of invention would call to mind the I/O task management techniques disclosed in *Murphy* when presented with the event-driven conditional rule based mail messaging system disclosed in *Gross*. It certainly would not have been obvious to one of ordinary skill in the art at the time of the invention, based solely on the prior art, *to even attempt* to incorporate into the event-driven and conditional rule based mail messaging system disclosed in *Gross* such I/O task management techniques as those disclosed in *Murphy*. Even more clearly, it certainly would not have been obvious to one of ordinary skill in the art at the time of the invention, based solely on the prior art, *to actually* incorporate into the event-driven and conditional rule based mail messaging system disclosed in *Gross* such I/O task management techniques as those disclosed in *Murphy*, which would be required to establish a *prima facie* case of obviousness under the M.P.E.P. and the governing Federal Circuit case law.

Accordingly, since the prior art fails to provide the required teaching, suggestion, or motivation to combine *Gross* with *Murphy* in the manner the Examiner proposes, Applicants respectfully submit that the Examiner's conclusions set forth in the final Office Action fall

well short of the requirements set forth in the M.P.E.P. and the governing Federal Circuit case law for demonstrating a *prima facie* case of obviousness. Thus, Applicants respectfully submit that the Examiner's proposed combination of *Gross* with *Murphy* appears to be merely an attempt, with the benefit of hindsight, to reconstruct Applicants' claims and is unsupported by the teachings of *Gross* and *Murphy*. Applicants respectfully submit that the rejection must therefore be withdrawn.

Second, as demonstrated above, Applicants respectfully submit that *Gross* is wholly inadequate as a reference against independent Claim 1. Thus, even assuming for the sake of argument that *Murphy* disclosed the portions of Claim 1 that the Examiner suggests, and even assuming for the sake of argument that there was the required teaching, suggestion, or motivation to combine *Gross* with *Murphy* as the Examiner proposes, the proposed *Gross-Murphy* combination would still fail to disclose, teach, or suggest the limitations specifically recited in independent Claim 1, as is required under the M.P.E.P. and the governing Federal Circuit cases for a *prima facie* case of obviousness.

For at least these reasons, Applicants respectfully request reconsideration and allowance of Claim 1 and its dependent claims. For at least the reasons stated with regard to independent Claim 1, Applicants respectfully request reconsideration and allowance of independent Claim 11 and its dependent claims.

II. No Waiver

All of Applicants' arguments and amendments are without prejudice or disclaimer. Additionally, Applicants have merely discussed example distinctions from the *Gross* and *Murphy* references. Other distinctions may exist, and Applicants reserve the right to discuss these additional distinctions in a later Response or on Appeal, if appropriate. By not responding to additional statements made by the Examiner, Applicants do not acquiesce to the Examiner's additional statements. The example distinctions discussed by Applicants are sufficient to overcome the obviousness rejections.

Conclusion

Applicants have made an earnest attempt to place this case in condition for allowance. For at least the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending claims.

If the Examiner believes a telephone conference would advance prosecution of this case in any way, the Examiner is invited to contact Christopher W. Kennerly, Attorney for Applicants, at the Examiner's convenience at (214) 953-6812.

Applicants believe no fees are due. If this is not correct, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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